

A NEW SPECIES OF *SARCOSTEMMA*  
FROM OKLAHOMAU. T. WATERFALL<sup>1</sup>

A COLLECTION of *Sarcostemma* was made by the author in the Black Mesa Area of the Oklahoma panhandle in June, 1948. It appeared possibly referable to *S. heterophylla* which it resembled in having peduncles longer than the pedicels, and plane leaves. However that species has flowers about 8 or 9 mm. in diameter<sup>2</sup>, and the corolla-lobes have fimbriate margins.<sup>3</sup> The Black Mesa *Sarcostemma* has larger flowers, about 17–20 mm. in diameter, and the margins are smooth. The corollas, with their oblong, obtuse lobes which are glabrous internally and sparsely short-pubescent externally, more nearly resemble those of *S. crispum*. However the latter species has flowers about 12–13 mm. in diameter, the corolla-lobes are ciliolate, the peduncles and pedicels are often about equal in length, and the leaf-margins are usually crisped. The species from the Black Mesa is further characterized by having laterally bilobed coronal vesicles, a distinguishing feature found in neither of the other species with which it might be confused. Believing this to be a distinct species, the author is describing it under *Sarcostemma* in accordance with Woodson's conclusions<sup>4</sup> regarding the inadvisability of attempting to maintain *Funastrum* and *Philibertia*. If the two be retained as distinct genera, the present species would obviously fall in *Funastrum*.

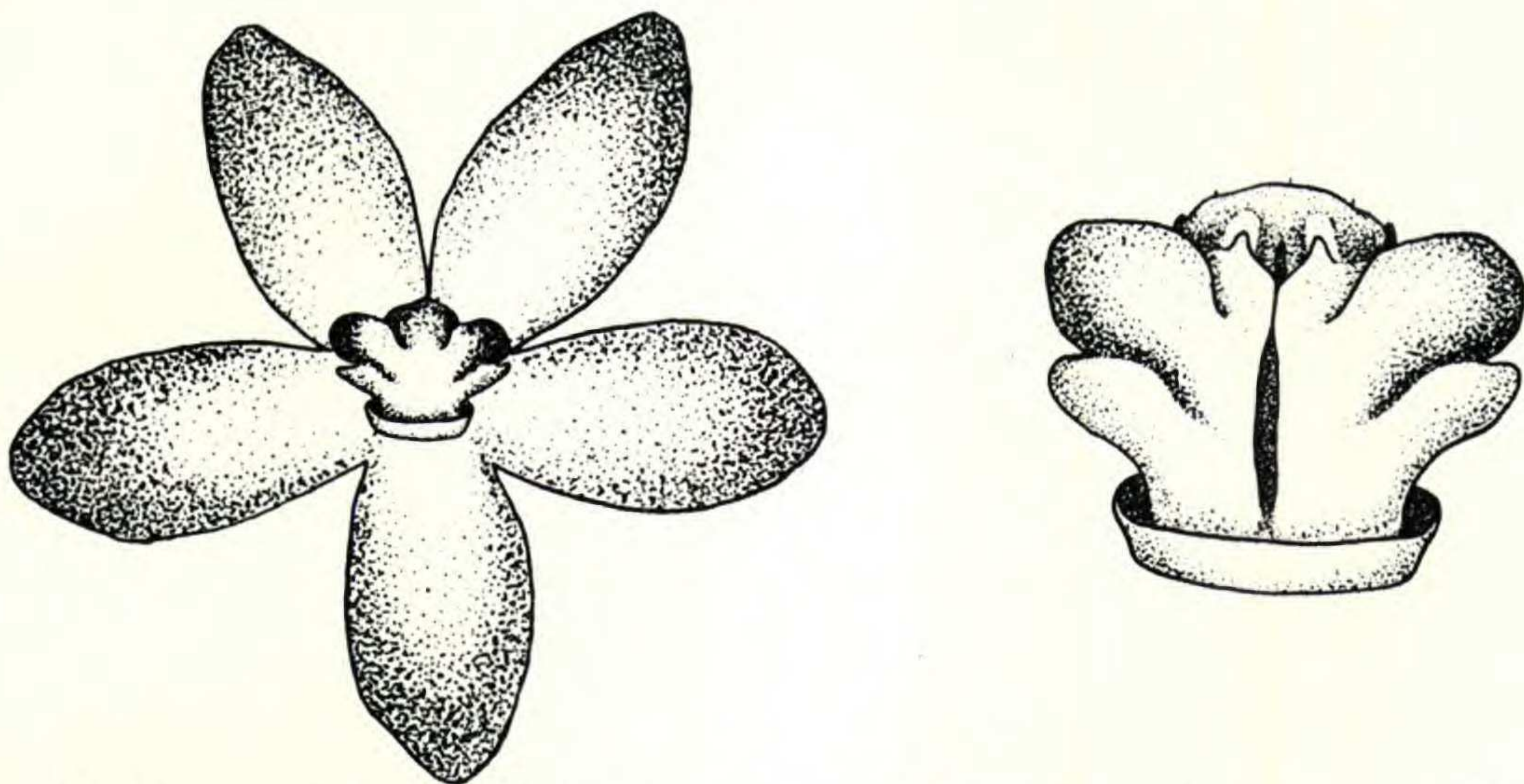
**SARCOSTEMMA lobata**, sp. nov. Caules volubiles, sparse recurvato-puberuli; folia sparse puberula, anguste linearia (4–10 cm. longa, 0.5–2.0 cm. lata ad basim), laminae basibus auriculato-hastatis vel auriculato-cordatis vel obtusis, petiolis 5–10 mm. longis; pedunculi 3–6 cm. longi, 2- vel 5-flori, pedicellis 1–2 cm. longis; sepala linearia vel lineari-lanceolata; flores 17–20 mm. diametro, petalis extrorsum sparse puberulis introrsum glabris, oblongis vel ovato-oblongis obtusis, 8–10 mm. longis 4 mm. latis, annulis 0.5–0.7 mm. altis, coronae segmentis lobatis.

<sup>1</sup> Botanist, Oklahoma Biological Survey.

<sup>2</sup> Torrey, John. *Bot. Mex. Bound.* 161. 1858.

<sup>3</sup> Torrey, John. *U. S. Rep. Explor. Miss. Pacif.* 5: 362. 1858.

<sup>4</sup> Woodson, Robt. E. *North American Asclepiadaceae. 1.* Ann. Mo. Bot. Gard. 28: 216–217. 1941.



*SARCOSTEMMA LOBATA*: FIG. 1 (left), open flower from the TYPE, actual diameter 2 cm.; FIG. 2 (right), gynostegium, actual diameter 2 mm. Drawings by Helen Skinner.

The TYPE is: *Waterfall* 7914, collected from sand around white sandstone north of the Black Mesa, three miles north and one-half mile west of Kenton, Cimarron County, June 13, 1948. It is in the Bebb Herbarium of the University of Oklahoma. ISOTYPES are in the Gray Herbarium, and the herbaria of the Missouri and New York Botanical Gardens. Growing with the type collection of *Sarcostemma lobata* were *Asclepias macrotis*, *Oryzopsis hymenoides*, and a *Physalis* sp., possibly *P. Fendleri*. *Sarcostemma lobata* was also collected as *Waterfall* 7928, slopes of buttes six miles south of Kenton, Cimarron County, June 14, 1948.

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HERBARIUM TECHNIQUE.—Pressed and dried plant material may be softened for dissection by the use of a solution of "Tide." Probably "Vel," "Dreft," or any of the detergents now on the market, would do as well. No particular formula is needed; use perhaps a teaspoon of Tide to a pint of water and stir rather than shake to avoid forming suds. Softening action is practically instantaneous, and material need not be removed from a herbarium sheet as for boiling. This method is particularly